

A Work Project, presented as a part of the requirements for the Award of a Master  
Degree in Management from the NOVA – School of Business and Economics

OPERATIONS MANAGEMENT – PROCESS (RE) DESIGN IN COMMERCIAL  
BANKING  
A PRATICAL EXAMPLE

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9<sup>th</sup> of September 2016

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## **Abstract**

This study aims to conciliate the bottom-up perspective of the Bank Z<sup>1</sup> from a specific view of an employee daily routine with a supported theoretical and data analysis of the operations management of a specific branch (Branch M). The present study is focused in understanding the challenges which services providers are facing with new technological world and financial restrictions, as well as proposing specific process improvements coherent with the Bank Z strategy. Branches re (design) is needed to answer the world's transformations; where both the Bank and customers are aware that branches are not the only communication channel.

**Key Words:** bottom-up perspective, operations management, technological world, re (design), branches

## **Introduction**

Operations Management is the group of “activities, decisions and responsibilities of managing the production and delivery of products and services” (Slack, Brandon-Jones & Johnston, 2013, p. 6). The delivery of services in banks depends on external factors such as “adjustments to technological developments, customer demands, investor aspirations and regulatory expectations” (Grant J., Gnyawali D. 1996). More than ever both threats and opportunities have to be converted in new services and have to be transformed into adjustments of how and where the services are to be offered. Services deliveries are influenced by internal factors, such as: the human resources policies in terms of functions, and recognitions where leaders are change makers; the information systems with qualitative and quantitative data as a powerful tool; and the analytical processes, essential for considering strategic changes at an organizational level. As a result, “internal corporate leadership and the external competitive environment as two

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<sup>1</sup> Due to confidentiality reasons the name of the Bank will be omitted and substituted by Bank Z.

primary stimuli for enhanced organizational learning” (Grant J., Gnyawali D. 1996). Consequently, banks must define the operations strategy “the overall direction and contribution of the operation’s function with the business; the way on which market requirements and operations resource capabilities are reconciled within the operations” (Slack, Brandon-Jones & Johnston, 2013, p. 707).

Thus, considering the above, the present study starts with the literature review, secondly a presentation on Bank Z highlighting its main features, and finally an analysis and proposal of (re)design to a particular business unit, followed by business units’ analysis –facts, numbers and figures – practical case. Sequentially the weaknesses identification and finally the conclusions, and study limitations with future recommendations which hopefully can help Bank Z addressing the mentioned challenges.

### **Literature Review**

Due to the 2008 global financial crisis that affected the economical environment and the financial institutions, the regulators have been establishing some measures in order to reduce risk management, provide transparency and banks capacity on shocks absorbing – Basel III. According to the *European Central Bank* (2015), besides the payments challenge consequence of the march of technology, the two other ones are the regulatory and the market challenges. However, not only the regulations and markets have changed but also customer’s behaviors that became more demanding, resulting in less loyalty, insecurity and lack of trust on the financial institutions. Additionally, the world became digital with significant advances in technology and internet access everywhere: mobile-phones and e-commerce. The online services also lead to the reducing of banks footprint, increasing the social responsibility of institutions. In Portugal, the individuals with Internet access had increased considerable since 1997 with 88.670 to 2.732.700

individuals in 2014<sup>2</sup>. The *SIBS*, the brand which mission is to simplify customers' life, offers the possibility of doing a plenty of secure operations in the ATM machines (such as service payments, account checking, transfers and transportation tickets, as an example). *SIBS Market Report* (2015), revealed that in 2014 there were 12, 9 million payments made with debit card, more 14,2% than in 2013, with a value of 922 million euros – more 10, 4% than the previous year. It is also mentioned that online shopping is growing in Portugal, with 600€ per household in 2013, despite the fact that countries like United Kingdom register values as 4000€ per household. To allow buying online *SIBS* created peer-to-peer solutions such as *MB Net* – a temporary credit card that is usually used once for one single transaction - which grew 16, 5% from 2013 to 2014 and the *MB Way* (using the mobile phone to do transactions) was in 2014 8% of total online consumption. These new services solutions arise is a reason for Trend #5 (2015) to highlight the fact that “financial transactions are no longer about dollars. They're about *bits*”, also because the “cost of bank transaction is approximately 20 times higher than a mobile transaction and more than 40 times higher than an online transaction” (PWC 2012). The alternative channels will lead to the decrease of the number of bank branches, from 2004 with 66 commercial branches per 100,000 adults until 2012 with 61 commercial branches per 100,000 adults<sup>3</sup>.

Contrarily, KPMG (2014) refers that customers value more the quality of the employees of bank branches and the face-to-face interaction, than technology. Capgemini (2013) reinforces this position, showing that for transactions such as compare available products, managing the account, pay a bill or check account balance, the percentage of customers that go to the bank branch is much smaller when compared with the

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<sup>2</sup> <http://www.pordata.pt/Portugal/Assinantes+do+acesso+%C3%A0+Internet-2093> (accessed August 27, 2016).

<sup>3</sup> [http://www.globalstat.eu/en/GlobalStat/Financial%2bActivities%2b%2b%2bStructure/Financial%2bMarket%2bInstitutions%2b%2bBanking%2bSector/Commercial%2bbank%2bbranches%2b\(per%2b100%2b000%2badults\)-539](http://www.globalstat.eu/en/GlobalStat/Financial%2bActivities%2b%2b%2bStructure/Financial%2bMarket%2bInstitutions%2b%2bBanking%2bSector/Commercial%2bbank%2bbranches%2b(per%2b100%2b000%2badults)-539) (accessed August 27, 2016).

percentage of services that customers prefer to obtain support from the bank branch such as apply for a loan, trade a security or obtain support from an employee – where the customer had the “highest positive experience”.

As a result, the role that bank branches play must change to integrate these challenges. As KPMG (2014) mentioned, the “service-based sectors sustainable revenue growth” is more than “new products or geographical expansion, but rather their ability to deliver a high quality and differentiating customer experience”. From 2004 to 2012 the customer satisfaction index showed a slightly improvement (Marsh& McLennan 2014).

The challenge of the banks according with Microsoft (2011) is to understand the needs of customers, which involves considering that as a result of financial collapse, customers want to control their finances, to have plenty of possibilities in different financial institutions and look for “better experience”. The bank of the future should integrate the different channels (the branch, the call center, the browser and the mobile), creating a synergy of interdependence and converge for a common goal – the customer.

PWC (2013) highlighted the fact that there are multiple solutions “for successfully transform the operating banks model” listing five practices that could be adopted to “transform the banks’ operating models that should be aligned with bank strategy, mission and vision”: “customer-back process transformation, product and service simplification, intensive digitization, governance and performance management transparency and delivery model optimization”. In concordance, KPMG (2012) pointed that challenges should be answered with cost reductions for example by implementing new IT architectures to reduce the high amount of paperwork processes required, providing automated processes and first time resolutions. It is also mentioned that long-term cost reduction measures should be implemented such as “**Straight Through Processing (STP)**” meaning minimizing human input to make staff savings, which

currently represent more than half of a bank's costs, **“Greater self-service channel usage”** for customers to carry out their own banking transactions without staff intervention and **“First Time Resolution (FTR)”** fewer points of contact between customers and staff.

Nowadays, more than ever is difficult to retain customers. Accenture (2016) stated that the “first contact resolution is key to retention (...) more than 80 percent said they could have been retained, mainly if their issue had been resolved on their first contact with the bank”. To be a problem solver, is one of the three key roles branches should develop. The other two are “digital ambassador” and “advisor hub for specialized services”. As a “digital ambassador” branches should “help increase the digital penetration of a bank's customer base and low bank transaction costs by educating laggards”. As an “advisor hub” by the fact customers require a bank that is available on and off line, twenty four hours a day, seven days a week. As a result sales and support should be on customer preferences, provide face-to-face interactions for advice in complex situations, offer “extended hours-weekends, late nights or on-demand remote services”, “initiate conversations, (...) closing business in the branch then maintaining the dialogue online” and “enable value aggregation with other providers”.

Hall E. et al. (1994) mentioned that the business unit redesign should be based on customer value, “penetrating company's core six elements; roles and responsibilities, measurements and incentives, organizational structure, information technology, and finally shared values and skills”. Ringim K., et al. (2013) initiated a business process reengineering (BPR) in a Nigerian Bank with a similar approach called “EAGLES (efficiency, accountability, goal orientations, leadership, effectiveness and staff motivation”) (Chain B. et al. (2016) confirmed that there is a strong correlation between

bank performance and variables such as “service quality, technology, innovation and employee commitment”.

Stoiljkovic V. et al. (2010) defended that Six Sigma Concept is a powerful system, possible to be applied in banking systems, or other industries of services dominance, with DMAIC method (“define opportunities, measure performances, analyze opportunities, improve and control performances”) for analysis and improvement of business processes.

Kovacs Z. (2015) contrarily defended that Six Sigma concept is limited to be applied in banking operations changes, highlighting the fact that processes implementation should be flexible to answer the external factors. Bain & Company (2008) reinforced Kovacs Z. (2015) position, announcing that Lean Six Sigma (LSS) fails in “prioritize improvements that will make the biggest difference” consequently, suggesting the X-Ray steps: “Mapping Value Stream, Benchmarking Performance and Prioritizing Improvements”. McKinsey & Company (2011) evidenced that share price and profits are no longer the guarantee that a company is at the top in long term, but about what is it doing differently from peers, as “to achieve and sustain excellence, leaders need to take deliberate steps to manage both the performance and the health of their organizations”, defining an organizational health index (OHI) which assesses the performance then terms of 38 management practices that have a proven correlation to financial results”.

### **The Bank Z Overview**

The Bank Z is a commercial and retail bank which mission and vision is to build long-term fair relationships with the customers, by offering fair solutions and by excelling not only at the branches but also in digital channels allowing answering some of the challenges caused by the 2008 crisis, mentioned above. The objective of the Bank is to



be the best commercial bank having the loyalty and the trust of customers, employees, shareholders and society. The Bank Z corporate policy consists on the motto -Simple, Personal and Fair – being the orientations inside and outside the Bank.

Coherent with a mission and a business model that values the diversity of geographies, the Bank has significant presence in ten countries: United States, Mexico, Chile, Brazil, Argentina, United Kingdom, Poland, Germany, Spain and Portugal.

The presence in Portugal became relevant since 1993 after the acquisition of other banks, with 3,6 million customers nowadays, 550 branches and 5329 employees<sup>4</sup>. According with the regions of Portugal there are three geographical areas: North, South and the Islands, where the business units are divided by commercial areas. On average each commercial area has 19 branches under supervision of the commercial director.

Considering the Bank Z organisation and branches management, there is a division according with the area where the branch is located. In this particular case, the focus will be on South Commercial Area One, and branches classifications according with the business value (classified as type A, B or C according with the dimension and business volume). The South Commercial Area One is composed in total by eighteen branches: seven of type A, nine of type B and two of type C. The customers are segmented as well in six areas according with earnings.<sup>5</sup>

### **The Branch M Case**

Branch M first open was in 1968, as a result of a merge of Bank Z with another Bank, located in noble area of Lisbon city center, “(...) banks that have a visible network of branch locations tend to bring about more confidence and credibility (...)” (Cummins Allison. 2015), which is surrounded by other services providers such as management

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<sup>4</sup> Source: Internal Data of Bank Z – confidential.

<sup>5</sup> See Table I in Appendix for more information.

and consultancy firms, hairdressers, restaurants, doctor's and lawyers offices', pharmacies and supermarkets.

Close to Branch M there are four other branches of the same Bank considering a radius of 386 meters and that is possible for the customer to walk to any other of the branches, if needed. The closest one it is in a distance of 275 meters, followed by other branch up to 400 meters distance, and another one in 597 meters distance. The furthest branch is localized 783 meters of distance from branch M.

However, the competitors of Bank Z are located in the same area too: there are two just across the street, being the closest only 54 meters far from Branch M, followed by another competitor within a distance of 73 meters. The furthest competitors are at a distance of 103 and 130 meters, respectively.

Branch M is considered to be a type A with 1628654, 31€ average of business volume and 3183 active clients. The Branch has 1572 mass-market customers, 751 medium customers and 860 "premium" customers. The branch timetable for public service is from Monday to Friday - from 8.30 a.m. to 3 p.m., without closing for lunch time. The working day has seven hours. There are some extended timetable public service branches; the closest one is located in a shopping center, with closing time at 4.30 p.m. There is also a branch located in Lisbon Region that is open on Saturdays but it is closed on Mondays, with a timetable from 9 p.m. to 4 p.m.

### **The Branch M: Human Resources and Capacity**

The human resources are the "organizations great asset and their strategy should provide a strategic advantage, involving identifying the number and type of people needed to be managed to develop the organization so that it meets its strategic business objectives and putting in place the programs and initiatives that attract, develop and retain appropriate staff" (Slack, Brandon-Jones & Johnston, 2013, p.253). Capgemini (2013)

agrees with previous authors, stating that “The branch human resources optimization can improve the branches efficiency without a large capital investment.”

The Bank Z Human Resources department, according with *Ulrich's Human Resources Roles* (Slack, Brandon-Jones & Johnston, 2013, p.255), is characterized as a changing agent. In one hand providing opportunities for employees to suggest improvements/solutions with the “Best Idea” event or to allow evaluation, in a scale from one to ten of the services provided by central services. On the other hand, empowers employees with mandatory training and by promoting workshops where employees can take part for areas where they feel the need to improve. As a consequence, effort is put on employees as change-makers in their own learning and based on merit, employees can be promoted. Additionally, there is also the possibility of internal mobility inside the organisation. The human resources policy is also “family-friendly”, sending books to employees with children, giving the day off children's birthday to the parents or new born welcome-kit as examples.

Bank Z has monetary performed based incentives strategy in order to encourage and motivate the employees. The year is divided in four semesters, each one having different objectives – to the branch and to each manager. The incentives are then applied according to the percentage of goals accomplishment. Every three months, in a meeting with branch directors, each employee is evaluated by corporate motto and annually by the structure – the branch director, the commercial director and coordinator director. The evaluations are available online where the employee can comment and explain whether agreeing or not with the evaluation.

Branch M human resources structure is composed by eleven people, and is organized by function: one director, one sub director, one commercial manager, one corporate manager, two account managers of mass-medium customers, three account managers

for the “premium” customers, one commercial assistant and one assistant - both able to perform as teller counter or back office. The assistants’ role is crucial on the management and the customers forwarding in the branch – providing the customers all the required support and guidance (“Welcome Figure”).

For the Branch M employees, the following equipment is provided; two printers, a telephone and a computer per cubicle, and a mobile phone per employee. To communicate internally, there is an internal messenger available.

There are three meeting rooms (one is not accessible to public) and four waiting chairs in total (two for the mass-medium customers and two for the “premium” customers).<sup>6</sup>

Branch M is equipped with three self-banking machines, one outside that is the ATM and two inside, available only for Bank Z customers to carry out: cash deposit, order check books and common checking account options. “Earlier waves of innovation, such as ATMs and telephone banking, promised to reduce the frequency of visits but turned out merely to increase the number of transactions by making it more convenient to withdraw money, say, or to check a balance.”<sup>7</sup> The data available for Branch M on self-banking machines when compared with teller counter actually reflects this opinion. The transactions made at ATM represent higher values when compared with the transactions made at teller counter: in March 2016 the ATM transactions counted were 1.736 and in June 2016 were 1.903. The transactions made at teller counter increased since March 2016 with a value of 926 transactions when compared with June 2016, 971 transactions<sup>8</sup>.

In addition, the self-banking machines Branch M has available are well characterised by technology with two tablets (used for account opening reducing paper work processes), wireless connection available for customers and non-customers and an online place to

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<sup>6</sup> See Figure I in Appendix for more information.

<sup>7</sup> <http://www.economist.com/node/21554746> (accessed May 16, 2016).

<sup>8</sup> Source: Internal Data of Bank Z – confidential.

Bank website usage. An application (app) is also available which allows customers to access financial information anytime and anywhere. “The widespread adoption of the smartphone is proving to be the first big innovation in banking that is actually causing people to make fewer visits to bank branches”<sup>9</sup>. As Microsoft (2011) pointed “technology is playing a huge part in transforming the banking experience, with smartphones and slates (tablets) giving consumers greater mobility”. However, technology has pitfalls, “when technology fails, human interactions can aid in ensuring a positive and consistent customer experience” (Deloitte 2015). To enhance the customer experience, the customer is invited to “walk-in” for more complex advice or information. Therefore the human resources must be trained, with strong sales skills to be able to a convict face-to-face transaction in a loyal customer.

### **Quality Measures and Performance Analysis**

“From customers’ perspective, expectations about service performance depend on what kind of relationship they want with the bank” (Microsoft 2011) and with quality “consistent conformance to customers’ experience” (Slack, Brandon-Jones & Johnston, 2013, p.709). Moreover, the ISO 9000 “a set of worldwide standards that established the requirements for companies’ quality management system” and ISO 14000 “international standard that guides environmental management systems and covers initial planning, implementation and objective assessment” (Slack, Brandon-Jones & Johnston, 2013, p.705) are guidelines to companies’ performance with manuals and procedures.

Considering the importance of quality, Bank Z services provided to customers have consequences on branches incentives. The branches are evaluated based on six indicators, each one with sub-indicators: the degree of satisfaction with the Bank; the degree of satisfaction with the branch; the degree of satisfaction with the account

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<sup>9</sup> <http://www.economist.com/node/21554746> (accessed May 16, 2016).

manager, the mystery customer evaluation; the percentage of answered telephone calls (a phone call has to be answered until the third ring) and finally number of complaints. Though the performance assessments are carried out every three months, the current study covers data from January to August 2016.

The degree of overall satisfaction is evaluated by the motto of the Bank and in a scale from one to ten, being the ten the most satisfied customers<sup>10</sup>. From the present year, the degree of overall satisfaction with the Bank since January has slightly decreased from 7.86 to 7.82 in August.

In what concerns the degree of global satisfaction with Branch M, it has had an increase from 8.46 in January to 8.69 in August. Regarding performance evaluation, the sub indicators show that the waiting time has a slightly decreased since January until August, from 8.88 until 8.14. In addition, the availability of the employee to listen and clarify had increase from 8, 89 in January to 9 in August. The branch answer to customers' requests has registered a value of 8.62 in both months of 2016.

The account manager evaluation sub-indicators reveal that the account manager counseling has had a small decrease from 7.62 in January to 7.29 in August. The answer to customers' requests has also shown a significantly decrease from 8.43 in January to 7.71 in August, as well as the proximity relation with account manager, which fell from 7.75 in January to 7.57 in August. The overall satisfaction with account manager has decreased from 8.00 in January to 7.57 in August.

The mystery customer compared with year 2015, evaluated better the general service of the Branch M, from 93,25% to 95% of accomplished elements such as general aspects, service and commercial behavior.

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<sup>10</sup> Source: Internal Data of Bank Z – confidential.

In what concerns the percentage of telephone calls in Branch M, in January, for a total of 417 telephone calls, 17 were not answered. In July<sup>11</sup>, in a total of 282 telephone calls, 22 were non-answered, representing an increase for 4% to 8% of non-answered calls. The data reflects that the number of telephone calls not answered has increased possibly due to the difficulty to conciliate the personal service in the branch with telephone service.

Regarding the complaints, the Branch M had registered two complaints since the beginning of the year.

### **Facts, numbers and figures – Practical Case**

To deeply understand the facts, number and figures data that were collected in the period between the 1<sup>st</sup> of May and the 31<sup>st</sup> of August, and to simplify the analysis considering the Branch working period (8.30 a.m. until 3.00 p.m.), the data was analysed in periods of half hours. It was also considered there were no customers at the branch at the weekends and national holidays.

The demand of Branch M is quite unpredictable and the process of customers' arrival (customer source) is infinite – “there is a large number of potential customers so that it is always possible for another customer to arrive no matter how many are being serviced” (Slack, Brandon-Jones & Johnston, 2013, p. 349), which means that it is not possible to know precisely the amount of customers that will appear in the branch each day and when will the customers appear. The Branch works in a logic of first-come, first-served with a multiple-channel queuing system – there is a waiting common line and the customers are distributed according with the availability.

The capacity management corresponds to the “maximum level of value-added activity over a period of time that the process can achieve under normal operating conditions”.

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<sup>11</sup> August data was not available yet.

(Slack, Brandon-Jones & Johnston, 2013, p.324). The planning and control capacity is best considered when using the Queuing or Waiting Lines Theory because it evidences “when operations fail to meet its demand, some of this demand would look elsewhere to be satisfied, but some would wait.” (Slack, Brandon-Jones & Johnston, 2013, p 348). Considering the rate of customers’ arrivals versus effective customer, per month<sup>12</sup> it is clear that except in June, the rates of May, July and August represented values very close to one or bigger than one, reflecting that in average arrive at Branch M more customers than the ones that are served. Also when comparing average effective customers with customers’ arrivals discrepancies are visible, being June the month with closest values to customers’ requests.

As a result of data collection, considering that the demand will behave similarly each month, it was possible to analyse the dates and the half hour periods with more customers’ afflux regarding teller counter.

Though there were some pre-existing limitations in data collecting of total customers in the branch, it was possible to analyse the “variability, both of the arrival of customers (or items) at a process and of how long each customer (or item) takes to process”. (Slack, Brandon-Jones & Johnston, 2013, p 361) by creating the rate of arrivals and the rate of customers effectively served. Branch M registers higher number of customers for the counter teller than to account manager.<sup>13</sup>

The data collected showed that the trend for higher number of customers in the branch are registered at the beginning of the month with values from 50 to 57 customers per day between the 8<sup>th</sup> – 10<sup>th</sup> of each month dates which correspond to the pensions pay day and the deadline of rent payments. After this period the number of customers starts to decrease, with 14 to 20 customers per day from the 11<sup>th</sup> to 17<sup>th</sup> of each month. After

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<sup>12</sup> See Table III in Appendix for more information.

<sup>13</sup> See Circular Charts I in Appendix for more information.



this date, the number of customers starts to increase again, from the 19<sup>th</sup> to 24<sup>th</sup> where there are pensions' pay days, as well as the salary day for the state workers and for some private companies<sup>14</sup>.

Considering the half hour periods, it is visible that there are trends as well for peaks of customers in the morning period between 10.30 -11 and the period of 11-11.30. In the afternoon, the period with more customers at the teller counter is between 2-2.30 and 2.30-3<sup>15</sup>. In June, the 9.30 to 10.00 half an hour period represented almost 70 customers in this period and afternoon period with a maximum of 92 customers in total. In July and August the period between 2-2.30 represented 80 customers at teller counter. In August period between 2.30-3, a maximum of 87 customers at teller counter.

### **Critical Processes – Weaknesses Identification**

“Managers must first identify the activities to include in the process being redesigned that are critical for value creation in the overall business unit” (Hall E. et al. 1994). The Branch M weaknesses are mainly focused on human resources management/roles in the current layout, the process design (“the overall configuration of a process that determines the sequence of activities and the flow of transformed resources between them”) and in the process mapping (“describing the processes in terms of how the activities within the process relate to each other”) (Slack, Brandon-Jones & Johnston, 2013, p. 708). It also includes potential problems with digital tools.

Firstly, it is important to refer that the dimension of the branch results from a merge between two branches of the same Bank, one only for “premium” customers, while the other was for mass-market customers. This merge justifies the actual size of the branch, the design issues and capacity availability.

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<sup>14</sup> See Charts III in Appendix for more information.

<sup>15</sup> See Charts I and Chart III in Appendix for more information.

Starting with Human Resources, even though there are eleven employees at the branch, these are not enough to manage the amount of paperwork and maintain service quality.

Therefore, the back office as to manage paperwork quickly, increasing the probability of human errors. Also, as a response to the demand of human resources policy, account managers have to rotate across branches keeping the holiday's period of the previous branch, leading to human resources problems while providing services.

Following with the process design of Branch M<sup>16</sup>, in front of the branch entrance it is located tellers counter area, near to the sub director's office. The area located to the right of the entrance is where the director's office is, followed by corporate manager's cubicle and the mass-medium customers account managers cubicles. On the other side of the branch is located the commercial manager's office and the cubicles for the "premium" customers managers.

Although there are three cubicles for the mass-medium customers account managers, only two are being used permanently. The cubicle next to director office has no usage too. As a consequence, within the branch there are two empty cubicles, one of which with high visibility, giving the impression to the customers that the "branch is empty". In addition, though the physical barriers between the cubicles give some privacy in the relationship between the customer and the account manager, it provides low visibility for the customers upon arrival at the Branch, to understand if account managers are available.

In what concerns "premium" managers account area near the waiting area, there is an additional entrance door that is currently out of service, without any clear identification from the outside. This lack of signage results in customers trying to enter in the Branch M through that door.

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<sup>16</sup> See Figure I in Appendix for more information.

As mentioned above, the role of the assistants/teller counter is to be the “welcome figure”. However, with cumulative responsibilities is not always possible to play this role or perform it effectively at all times. Every time there is needed to forward the customers to the account manager, the teller need to check their availability, either by telephone or by internal messenger. If there is no queue to the teller counter, teller counter should escort the customer to the specific cubicle, not representing an eventual problem. Otherwise, if there is a queue it would be difficult for the teller counter to represent the “welcome” role. Another hypothesis is when customers do not respect the queue, interrupting the teller counter to ask for the account manager.

In the days with more afflux, customers walk “freely” in the branch. For usual customers that already know the account manager and how the branch is organised, this does not lead to a problem. On the other hand, customers that are not familiar with the branch, search for an available account manager, standing in front of cubicles – “listening” or interrupting telephone calls or on-going meetings. Furthermore, customers that cannot find the account manager and return to the entrance area, with unexpected waiting time, feel the need to ask the teller counter for information on account managers’ availability, even interrupting teller counter attendance. The teller counter cannot provide a quality service to both clients: to the one that is being served and the one that is waiting for the account manager.

Another problem that is evident is the fact that customers do not know how the branch is organised in terms of roles and functions: though there is a name plate with the employees function in each desk, it is not evident. Customers that are to meet with the account managers’ stand on counter teller queue, or the customers looking forward to do simple transactions that are not performed by the teller counter.

In what concerns the process mapping<sup>17</sup>, at the beginning point when the customer walks in the Branch for the counter teller, eventual problems arise with the waiting time to get served. Additionally, due to the fact that are two cubicles available for this function, and one is empty, it makes the perception on customers that there is always a second counter teller that could start working at any time, once there is a queue. However, there is only one money verification machine and one certifier of deposit document. These could result, not only in an increase on the waiting time but eventually loudness of customers, creating an uncomfortable environment. In what concerns self-banking and online channels, if customers are not familiar on how to manage a situation, they will ask the counter teller for support. The online/self-banking customer then interrupts the teller counter procedures even when there is another customer being served at the moment. The counter teller asks the “online/self-banking” customer to wait until the present customer is served. As a result, counter teller has to manage more than one customer at a time.

When a customer walks in the branch for a meeting with the account manager, there are potential problems when the customer does not have an allocated account manager associated or if the appointment is not scheduled, forcing the counter teller to manage the situation either by telephone or internal messenger, resulting in waiting time to get served. In addition, it may be the case that the customer is raising an issue that will need input from the central services. There are also situations where the customer interrupts ongoing appointments by “walking freely” in account managers’ cubicle.

When the customer has contact with Branch M by email, there is possibility of an increased waiting time for feedback especially when the queries depend on central services support. Besides the fact that Bank Z has a policy and an obligation to always

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<sup>17</sup> See Flowchart I in Appendix for more information.

answer the customer's requests after online experience, there are customers who feel the need to go to the branch to either ask for more information in a specific query or because somehow have the feeling of a big delay in the feedback time and therefore may present a claim.

When calling the Bank several situations may occur: firstly if the support line cannot solve the customers' issue and the approach to the Branch is already conditioned by the fact that the support line cannot solve the customer's problem. Secondly, sometimes after the telephone experience the customer feel the need to go to the branch, as it could happens that customer has a bad feeling about the provided service. In general, calling the Bank could result in waiting time to get served or the call answered when was already picked.

Regarding the self-banking machines, the ATM machine is located outside Branch M, which is not clearly identified resulting in customers and non-customers of Bank Z to enter asking if there is inside an ATM available or searching for a place to do their operations safely.

In the digital tools, there is a limitation regarding the corporate customer's access, the browser does not redirect the page so it is not possible to give personal advice on how to use online tool. The problem was already reported but unfortunately has not been solved yet.

The problems of Branch M are not only in the layout and flow of the customers. There are internal system issues too, not visible to customers. As mentioned previously, Bank Z is a result of a merge resulting that some customers still have previous customers' numbers associated when for example, on search engine is placed the tax number. As an example, one customer may still have three customer numbers associated, though only

one is associated with the current active contracts. To understand which contract is active takes some minutes to manage, representing waiting time for the customer.

The Branch is also equipped with citizen cards machines, which are not working yet.

In what concerns the paperwork and the role developed by the back office, considering the existing rules and regulations, combined with ISO 14000 and ISO 9000 and with Bank of Portugal guidelines in Laundering Money Law<sup>18</sup>, it becomes extremely important to update customers' bank data at all times. In order to ensure the constant update, Branch M implemented a system where all requests are registered in a shared document, within the Branch team.

However, there is still a quantity of paper work making it impossible to register every single request. It is important to highlight that there are requests that are resolved by central services, in a specific knowledge area in which, a specific platform is provided to the employees. Each process request for central services has a reference number which is fed into the shared document.

The central services platform has attachment size limitations, which difficult the back office tasks as the documents needed for the process occupy more space. The back office has then to spend extra time managing the processes digitalization in order to upload them into the platform. Also, the answer time defined for the central services is in maximum the request day submitted plus three, which can lead to potential problems on customer's expectations.

Additionally, sometimes it is requested to have real time solutions/information for customers and it can be quite challenging to get a connection to specific areas in central services.

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<sup>18</sup><https://www.bportugal.pt/ptPT/OBancoeoEurosistema/ComunicadoseNotasdeInformacao/Paginas/bpcom20131219.aspx> (accessed May 18, 2016)

### **Solutions/Recommendations**

According with quality metrics mentioned previously it is clear that there is still room for improvement within Branch M. Wang L. et al. (2012) defended that “the process improvement in commercial banks is a dynamic, continuous forward process, and it can get a good synergy effect that the strategic integration of Continuous Process Improvement (CPI) theory and Process Banking System (PBS) thinking”.

Microsoft (2011) believes that there are “five dimensions on branch transformation that can lead to a significant increase in customer experience and financial performance that are branch design, talent, channels, innovation and brand”.

Taking in consideration the authors above, the collected data and associated analysis some solutions/recommendations are outlined. The solutions for Branch M should include process design, at product and service level as they could result in “profound implications for the way the operation eventually has to produce them” (Slack, Brandon-Jones & Johnston, 2013, p.98) making sure that the process performance is appropriate to achieve the objectives. Furthermore the way resources are positioned to each other and how its various tasks are allocated to the transforming resources minimise the “length of flow thought the operation and preferably make the flow clear” (Slack, Brandon-Jones & Johnston, 2013, p.193).

### **Human Resources**

Starting with Human Resources, it is proposed that account manager’s rotation would only occur after the longer holiday’s period, allowing the quality of services not to be compromised. Additionally, process should be automatized as much as possible.

## **Layout**

Regarding Branch M layout<sup>19</sup>, recommendation would be to have the cubicles correspondent to the account managers of mass market, occupying the first and more visible cubicle as well as the second and remove the third exiting one. This would allow having more privacy as the cubicles would be further away from each other.

The physical barrier would have to be managed to not cut completely the eye contact between the account manager and the customer. The height of the clear strips should be thin the eye level of account manager when sitting at is cubicle, allowing visual contact with customers. Moreover, the plate name with the function has to be more evident and clear. Displaying the organizational chart with names, functions and photographs of employees in a visible place would be a solution, as well allowing customers to understand and see it while waiting.

Additionally, the cubicle next to directors' one should be removed and replaced by a waiting room with an interactive hall. The back office employee should be placed in a more reserved and quiet area, away from the public where the paperwork could be easily managed.

In what concerns teller counter, to prevent the rates mentioned above, the two tellers counters (more human resources) should work simultaneously or if the choice would me to maintain only one teller counter additional self-banking machines (technology) must be provided. Alternatively, and advance station to orientate customers.

The out of service entrance should be signalised forwarding the customers to the main entrance. The ATM should be signalised too.

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<sup>19</sup> See Figure II and Figure III in Appendix for more information.



### **“Welcome Figure” and Process Design**

In accordance with the Bank Z motto there should always be a first interaction between the “welcome” employee and the customer that approaches the Branch, not allowing the customer to feel lost. A cost effective solution could be a ticket dispenser near the entrance, where tickets would be divided in five areas; teller counter, mass-medium account managers, “premium” managers, corporate manager and finally for general information, which would represent costs savings in terms of human resources structures. However, this solution would not follow Bank Z’s motto; “simple, personal and fair”. An alternative could be an advance station (“gate-keeper”) empowering customers’ relationship, with a clear responsibility to “welcome” customers and forward them to the correct area. This advance station would be responsible not only for screening customers, but also the telephone calls, allowing metrics to improve. Both of these solutions would allow reducing waiting times and interruptions during the time a customer is being served. It would also avoid the fact that the teller has to manage the customers’ arrivals. To provide a complementary tool to ticket dispenser, the customers could have information on the waiting queue on time prevision or the number of customers already waiting and expected time of meetings to end, to be included in the app, as an example.

### **Internal Systems Issues**

Regarding the previous merges with other banks and having in consideration that these processes need implementation and transition time periods, becomes a weakness point it not completely closed yet and represent failures in customers’ service. As a result, with the support from the IT team on data analysis of customers’ account history, only one number would prevale. This information could also be combined with the citizen cards machine, which would allow accessing a “profile” of the customers immediately. This

“profile” would be a folder per customer where all the documents, requirements, contracts information could be easily accessed by the employees, updating information every time customer arrives at the branch.

### **Digital Tools**

Moreover, though there are two tablets available in the branch that are currently being used for accounts opening, the future solution, and a way to combine with the previously mentioned “profile” and paperwork process reducing would be to equip every cubicle with a tablet. As a consequence, the products could be subscribed (not including loans or operations that need Bank Z previous documentation, approval and evaluation) and automatically send the contractual documents to the customer’s email.

For customers that do not have an email, physical documentation would be provided.

In what concerns the central services platform, limitations on the attachment size should not exist allowing uploading more information at a time. Each specialized area in central services should have an allocated person (front office) to who branches could call in cases of urgent situations or doubts in procedures.

The online browser experience is an issue that could be updated by IT team as it is compromising one of the promising future tools of as well as simplifying processes.

The support line received the award from *APCC* for the *Best Contact Center in 2015*<sup>20</sup>, reflecting that the problems which can be solved by the support line are actually solved.

However, it is important to refer that some issues cannot be resolved over the telephone.

As the channels should be complementary, the support line forward customers to the branches for better service quality.

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<sup>20</sup> Source: Public Information that cannot be mentioned to maintain Bank Z confidentiality

### **Study analysis limitations**

Firstly it is important to mention that the time horizon of the data is short, as only four months were considered (May, June, July and August). For consistent changes and deeper analysis a long term perspective would be needed. Also, it was considered that the collected data is representative of Branch M figures and that the trends will follow similarly in subsequent months.

The Branch M data analysis had some limitations, as understood during the collecting time. Some data was difficult to collect or it was not available for a more in depth analysis. For a long term perspective and to implement more effective solutions, it would be interesting to implement a local survey to customers measuring the time in minutes which customers would be willing to wait or how the layout and design of the branch is perceived by the customers. As mentioned before, the customers have the perception that the teller counter is alone at the branch. The information results from informal opinions that customers share with employees, which is not accurately.

In what concerns measuring the number of customers that arrive at the branch, a trial of a ticket dispenser would allow to have real numbers of customers' arrivals, as well as measuring the waiting queue according to Theory of Waiting Line. The counting method measure of the total number of customers which arrives at the branch was recorded by a single person in simple manual verification that was counting the number of customers that arrive at branch every 30 minute. It is important however to outline the fallibleness, as in periods of higher stress or a higher number of customers on the waiting queue; the person keeping the records could accurately consider everyone that arrives at the same time.

The customers that arrive at the branch that are for the teller counter can be accounted on teller counter journal. The managers should always register the served customers in

the system. The data collected on total of served customers by the managers each day is based on the information the account managers register on the system. However this depends on an effective recording performed by the account manager. Therefore fails in registrations will influence the conclusion about the Branch M numbers.

Furthermore, Theory of Waiting Line analyses the arrival of customers in average which is fallible too, to better understand the waiting time standard deviation analysis is needed. Also, the teller counter answers to queue environment trying to be proactive in customers service, searching to be effective and efficient. As a result, it is not possible to state Branch M fail to answer customers' needs in counter teller queue.

Additionally, due to the Bank role secrecy of profession and confidentiality rules of Bank Z, was not always possible to have access to internal data usage or even public data of Bank Z that cannot be used as reference because no relations could be found.

### **Conclusions**

Despite data limitations, there are some conclusions that can be taken for the data analysis and the practical case of the Branch M. Due to surrounding environment and human behavior "resistant to change" is "very difficult to conduct a diverse array of experiments within the confines of a traditionally designed bank branch. Experiments require frequent changes in practices and processes, which neither the branch employees nor the physical facilities were prepared for."<sup>21</sup> Bank Z already started a changing path to adjust to both internal and external challenges.

To implement changes firstly pilot versions should be implemented, followed by in depth analysis of the pilot results, having in consideration all the relevant variables implementation should follow in gradual steps defined during a period of time.

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<sup>21</sup><http://hbswk.hbs.edu/item/how-bank-of-america-turned-branches-into-service-development-laboratories> (accessed May 18, 2016)

During the time this project was developed, Bank Z showed openness towards “the branch of the future”<sup>22</sup> focusing on moving towards the trend. Taking in consideration that “all channels should be complementary and not alternative to the traditional branch” (Bulgarea, C.N. 2011) redesign the branches is the future of banking, “there are many reasons why closing a bank’s branch can result in poor outcomes; the loss of high street presence can shrink a bank’s presence in the public; competitors are in a stronger position to seize market share; brand equity can be compromised, and customers could lose confidence and seek out another bank” (Accenture, 2016).

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<sup>22</sup> <http://thefinanser.com/2016/01/still-talking-about-the-branch-of-the-future-dont-laugh.html/> (accessed August 20, 2016).

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